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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,960	10/10/2001	Hideo Miura	Q66637	6254

7590 06/17/2004  
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, NW  
Washington, DC 20037-3213

EXAMINER
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NGUYEN, PHILLIP

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n N .

09/972,960

Applicant(s)

MIURA ET AL.

Examiner

Phillip Nguyen

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-- The MAILING DATE of this communicati n appears on the cover sheet with the correspondenc address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 4-5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Chikuma et al. ('369).

With respect to claim 1, Chikuma discloses in Figure 1 a wavelength converting module comprising a semiconductor laser 1 from which a fundamental wave exits; a light wavelength converting element 3 which is optically coupled to the semiconductor laser, and which converts wavelength of the fundamental wave which has entered from the semiconductor laser; a wavelength plate 7 disposed at a light exiting side of the light wavelength converting element; and a removing portion 5, disposed between the wavelength plate and the light wavelength converting element, for removing the fundamental wave from light incident on the removing portion.

With respect to claims 4-5, Chikuma discloses the wavelength plate being a quarter wave plate and the wave plate is disposed orthogonal to an optical axis of light incident on the wavelength plate.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 6-7 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chikuma ('369) in view of Tamada ('956).

With respect to claims 2-3 and 6-7, Chikuma discloses the claimed invention except for the removing portion being an IR cutting filter and the light wavelength-converting element being directly joined to the laser, also a beam splitter being provided at a light exiting side of the wavelength plate with a photodiode on the same side. Tamada discloses in Figures 12-13 a laser device that includes laser source, wave plate 34, beam splitter 35 and photodiode 40 at the exiting side of the wave plate 34. For the improvement of the laser apparatus, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide an IR cutting filter as the primary wavelength filter, beam splitter and photodetector on the exiting side of the wavelength plate in order to monitor the output wavelength and power of the output laser beam from the laser source as taught by Tamada.

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With respect to claims 11-13, it is inherent that the current control applied to the laser source is based on the amount of light detected by the photodetector.

With respect to claims 14-15, shielding the photodiode and beam splitter from scattered light from external resonator only involves the routine skill in the art.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chikuma ('369) in view of Murakami et al. ('312). Chikuma discloses the claimed invention except for an attenuating portion provided at the exiting side of the wavelength-converting element. Murakami discloses in Figure 2 a laser apparatus including an attenuator in order to attenuating portion 112. For the advantageous benefits of the laser apparatus, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide an attenuator at the exiting side of the wavelength-converting element to attenuate the laser beam before outputting as taught by Murakami.

#### *Citation of Pertinent References*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Chikuma et al. discloses Optical Pickup, Optical Information Recording Carrier and Recording and Reproducing Apparatus thereof, U.S. Patent No. 5172369

The patent to Tamada discloses Optical Recording Medium Reproducing Apparatus, and Recording and Reproducing Apparatus thereof, U.S. Patent No. 6515956

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The patent to Murakami et al. discloses Method and Apparatus for Inspecting High-Precision Patterns, U.S. Patent No. 6381356

***Communication Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Nguyen whose telephone number is 571-272-1947. The examiner can normally be reached on 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DON WONG can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Don Wong  
Supervisory Patent Examiner  
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